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Article:	Sustainable Media: Environmental Responsibility in the Industry
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ABSTRACT

This study explores the impact of sustainable media on dispersing relevant information and agenda-setters to interrogate the issues pertaining to ecological pollution, climate change, and loss of biological variability as they pertain to the media industry in Pakistan. It is hypothesized that sustainable media promotes and sustains the Sustainable Development Goals (SDGs) of 2030. This study structured its methodology to conform with the qualitative methodology, making its data gathering and evaluation into textual analysis. This study found that the Pakistan media has the capacity to broaden understanding of environmental issues such as climate change, pollution, and loss of biodiversity. However, this study discovered that there are limited studies available for showing the complexity and pluralistic principle needed to reinforce environmental responsibility. Sustainable media has the capacity to sustain and achieve the SDGs 2030 plan. However, there is a need for the provision of more studies on the subject.

Key Words: Climate Change, Environmental Responsibility, Pakistan, Theory of Planned Behaviour, Media, Sustainability.

Introduction

Climate change has proven to be a renowned phenomenon that has since warranted individuals, institutions, and government officials to seek ways to re-event both their mundane and professional activities. Indeed, the urgency entrenched in climate change is easily articulated in its definition; a significant transformation in weather patterns which includes rainfall, snow, temperature, or wind patterns, lasting for decades (Fakana, 2020). The major effects of climate change are not only captured from the weather changes but also the effects it has on biodiversity. It is estimated that the world has consistently lost biodiversity as a result of pollution and changes in weather conditions, thereby resulting in danger to animals, plants, and even humans (Khazalah and Gopalan, 2019).

Also, the rampant effects of climate change have triggered the Earth to experience one of the warmest weather conditions since its creation. As of 2022, the Earth has generated 0.91 degrees Celsius, making it the sixth warmest year ever (Alves, 2024). The implication suggested that both humans and plants would face the danger of extinction gradually since the change in weather conditions would not only affect the food eaten but also the water drunk by people (Zhong, 2016).

Given the volatile state of climate change, the United Nations, in 2015, established the Sustainable Development Goals (SDGs) which comprised a 2030 agenda formed to mitigate against the consequences of climate change by facilitating economic, social, and environmental prosperity for people across the world (Allen et al., 2018). Scheyvens et al. (2016) also revealed that the SDGs were established by the United Nations for all countries of the world to move beyond business as usual, about their daily activities since the present effect of climate change has shown that there is a paradigm shift between the state of humans and the planet's status.

Janoušková et al. (2018) further disclosed that the SDGs goals proffered to various countries and institutions included 17 which could be shortened into various pertinent topics. This study chose to delve into the 16th goal, peace, justice, and strong institutions. This will require literature-based research to show how the media could and did safeguard strong institutions, peace, and justice on the heels of climate change within its case study, Pakistan.

In light of the statement above, the media stands as a tool that could be wielded to enhance more information about the dangers of climate change. Wielding sustainability as an effective tool, the media could upend the acceleration of climate change by rendering conscious people and institutions' decisions that endangered the environment. Wielding Pakistan as a case study, this study demonstrated how the media could proffer sustainability to ensure that the citizens are environmentally responsible to curtail the effects of climate change.

Research Method Used

This study ensured that its data gathering, and analysis conformed to the use of the qualitative research method, thereby prioritizing on the use of textual analysis and flexible data search, rather than seeking to show numerical evaluation (Rahman, 2020). The study wielded a literature-based method to validate its subsequent findings about sustainable media and environmental responsibility within the industry. The study gathered its pertinent data from online databases which included Google Scholar, Tandfonline, JSTOR, and SAGE. This study intentionally used the qualitative method to provide a flexible bent concerning how various relevant sources could be used during the data gathering and analysis process of the research.

Causes of Climate Change

One main reason that triggered the rampant state of climate change entailed human activities, especially as it pertains to the use of gas as well as electricity, which in turn, results in the increase of carbon emissions which proved harmful to the hemisphere (Mokhov et al., 2020). Singh et al. (2018) also affirmed the statement above by revealing that climate change is caused by carbon footprints generated by fossil fuel burning initiated by human activities. The study further revealed that one of the means by which humans initiate the burning of fossil fuels involves industrialization (Singh et al., 2018). Patel and Choudhury (2021) also attested to the statement made by Singh et al. (2018) by revealing that the human activities entrenched under industrialization have since spurred large numbers of carbon dioxide and other varied amounts of greenhouse gases into the atmosphere, resulting in the disruption of the weather conditions.

Apart from human activities, climate change could also be caused by nature. Natural disasters such as explosions from volcanos, geological motions, changes in the sun's rays and other features, and It has been shown that any minor shift to the trajectory of the Earth could affect the manner in which it got cold and warm since such movement has a strong chance of either negatively or positively affecting the future of humankind (Mousavi et al., 2020; 367). Trenberth et al. (2015) also revealed that the changes in the sun's rays and abrupt volcanic eruptions have since contributed to the accelerated impact of climate change, biodiversity loss, and pollution. Cavicchioli et al. (2019) also discovered that nature does not only have a hand in the accelerating effect of climate change but that human activities triggered the main effect of climate change. The study revealed that nature's effect on climate change is short since it only involves the gradual changes in the sun's rays and of volcanic eruptions while human activities that endanger microorganisms are constant in rapidly endangering the ecosystem (Cavicchioli et al., 2019).

Climate Change and Pakistan

The negative impact of climate change can be felt and seen in every region of the world. In the context of Pakistan, the country has witnessed a rapid rise in its temperature and rainfall, thereby resulting in the loss of crops and endangering of human lives and animals (Qaisrani et al., 2018). Pakistan has the majority (70 percent) of its lands ranging from arid to semi-arid (Qaisrani et al., 2018). The study further revealed that 47 percent of the country's land is used for agricultural produce while the other percentages are used interchangeably for industrial and housing regions (Rehman et al., 2013; Qaisrani et al. 2018). However, according to Pakistan's government, the country has since experienced numerous dangers in its weather conditions which involved its having to change the weather patterns to become volatile in recent years (Ebrahim, 2023). As a result of the changes in the weather patterns triggered by climate change, Pakistan has since experienced droughts, water scarcity, industrial and urban air and water pollution, soil erosion, and loss of biodiversity (Ebrahim, 2023). The climatic conditions have also prompted both economic and social consequences for the country, with the experiences of drought causing the country to lose its agricultural produce gradually and the encroachment of people to urban regions resulting in huge disasters to the environment (Ebrahim, 2023).

When placed alongside other countries like Iran, Pakistan contributes less to carbon emissions, with Lin and Ahmad (2017) disclosing that the country contributes less than 1 percent, which is 0.8 percent of the global carbon emission. Pakistan emits less carbon dioxide

when compared with Iran which, along with countries such as the US, Japan, India, China, the European Union, Russia, and Canada, stand as the eight regions of the world that emit more carbon (Olivier et al., 2016). On the other hand, Pakistan ranks as 28th (Raza and Lin, 2022).

In light of the statement above, Pakistan's contribution to climate change might prove to be less when compared with Iran's, especially as revealed by Mansouri et al. (2019) who stated Pakistan stands as more likely to experience negative effects of climate change shown through its 2.6 Celsius increase in its temperature and 35 percent reduction in its precipitation. The implication suggested that the country stands as one of the countries that is less likely to emit carbon dioxide through its less involvement in industrialization.

However, as disclosed by Hussain et al. (2020), Pakistan stands as one of the countries that has fought against the increase in climatic conditions by establishing adaptive strategies such as adopting agriculture and minimizing its industrialization activities in recent years. The study revealed that the country deliberately expanded its agricultural activities to ensure that its citizens resist opting for activities that might spur climate change devastation (Hussain et al., 2020). However, Ahmed et al. (2022) disputed the statement above by revealing that Pakistan, rather than reducing its activities in industrialization, has accelerated industrial development to secure its economic, political, and social welfare. Mudakkar et al. (2013) also revealed that rather than embracing agricultural activities, Pakistan's penchant for opting for industrialization and urbanization has continued to increase the consequences of climate change, resulting in an increase in pollution and loss of biodiversity in recent years. In other words, Pakistan's persistence in industrialization negatively influenced its struggle to decrease its carbon footprint.

As of 2022, the country's total carbon emissions stood at 200 million metric tons (Tiseo, 2024). In 2021, the nation revised its Nationally Determined Contribution (NDC), which included a conditional goal of decreasing estimated carbon emissions by 50% by 2030, with 35% of the reduction sourced from grants gained from external developed nations (such as the USAID) and 15 percent from local sources (CCPI, 2024). This meant that Pakistan's effort to tackle its industrial activities in terms of climate change continues.

Pakistan has since continued to experience the consequences of climate change. According to Khan et al. (2016), Pakistan is located in a region where there are minimal rainfalls and water, but the advent of climate change has since resulted in the country facing vulnerabilities in terms of its experiencing no water or too much water from changes in monsoons. The implication of the statement above suggested that, for instance, farmers seeking the usual rainfall patterns to grow their crops now face the danger of not getting any water or too much water, thereby either facing starvation or soil erosion.

Media Role in Pakistan

According to Siraj (2008), Pakistan boasts of a variety of media houses and avenues, irrespective of languages which include Urdu and English Language. The implication suggested the country facilitated an atmosphere of inclusion in its media use of both Urdu and other languages. However, the reverse is the case since there are certain political and legal forces established to restrict the information provided by the media in both the past and present.

Like other countries across the world, the media in Pakistan is both owned by the government as well as private parties (Kux, 2001). Both the private and public media companies situated in Pakistan often undergo restrictions and challenges before the publication

of their news or data, with the political power having a say in what shapes or forms the information being published (Hull, 2012). According to Nadadur (2007), various terrorist groups within the country have the power to keep an eye on the media and the power to suspend or cancel the licenses of any newspaper or journal that a jury deems to have published derogatory or anti-religious content or information that would be deemed harmful to the interests of the country. The implication of the statement above suggested that the media often sought to appease legal and political forces at play within the country, thereby rendering the news coverage and other pertinent data divulged in its operations based on either bias or sought to foster survival for the media institutions. Eljaz et al. (2014) also noted the challenges facing Pakistan media by revealing through their findings that it was not uncommon for journalists to be attacked either by suicide bombers or knife-wielding fanatics, especially in the name of Islam.

Ricciardi (2012) revealed that the media in Pakistan often face the challenges of political and religious restrictions in terms of bias which included gatekeeping, restricting news coverage, and edited statements by the political power. The implication suggested that Pakistan's media often experience restrictions in terms of how its news coverage and other pertinent information could be perceived as either false or true by the citizens. Hannan and Saleem (2014) disclosed the extent to which the media is being restricted by the political power of the country by demonstrating that the media often wielded the element of ideological manipulation as constructed by the government in power to validate its current stance on the people. For instance, as shown by the study, the Pakistan media often sought to validate acts such as the government's prioritization of its conflict against its neighboring country, India, making vague non-bias broadcasting and news coverage (Siraj, 2008; Kuypers, 2006; Paracha et al. 2012), thereby omitting the likely dangers inherent in the development of forming partiality all in the act of ensuring that morality is established.

In light of the numerous restrictions experienced by the media in both legal and political spheres, one would think that the advent of sustainable media cannot become established in the country. However, the reverse is the case, as shown by Ghaznavi et al. (2024) and Khan et al. (2011) who both demonstrated that the role of the media in recent years has since involved focusing on facilitating environmental responsibility by citizens as a means of countering the effects of climate change. Nevertheless, before the discussion on how Pakistan could mitigate the effects of climate change, there is a need to describe sustainable media and its role in fostering environmental responsibility.

Sustainable Media and Environmental Responsibility

Huang et al. (2019) revealed that sustainable media implies expanding and focusing on the concept of sustainability as it relates to the environmental implications of activities by people within a region. The concept of sustainable media could be shown clearly by describing the term sustainability as it relates to catering to environmental responsibility. Sustainability, according to Luque González et al. (2021), involves wielding science in a manner that fosters participation and goes beyond various disciplines as well as seeking to understand uncertain phenomena such as climate change and its growing effects. Moore et al. (2017) also disclosed that sustainability refers to the process of adapting and evolving developed strategies, implemented programs, and practices to counter future hazards. In other words, sustainability

encompasses programs, strategies, and activities done to adapt and evolve people's understanding of phenomena likely to endanger either their present or future well-being.

Mitra (2017) further broadened the description of sustainability to encapsulate the development [either in terms of a strategy, practice, or program] that meets the needs currently without marring the prosperity to be had from future endeavors. It is no wonder that Elliot et al. (2017) showed that the subject of sustainability often seeks to develop consensus among organizations, governmental authorities, and respective individuals on how to ascertain economic growth and enhance the quality of life in both global and regional capacity.

In media context, sustainability could be achieved when the media fosters an inclusive partnership with the people, the organization, and the government to monitor and secure the natural environment (Hernandez et al., 2022). Bodt (2007) further revealed that the media could foster a chain reaction in the sense that it could facilitate how the people, government, and institutions within a region could embrace sustainable practices by focusing on educating them concerning the subtle connection that exists between their activities and the wellbeing of the natural environment.

Karimi et al. (2021) broadened the relationship between the media and sustainability by revealing that the media could employ environmental knowledge to facilitate the theory of planned behavior (TPB). TPB, as shown by Sulaiman et al. (2021), is predicated on the idea that actions that are typically carried out voluntarily or involuntarily can occasionally be influenced by variables beyond one's control. Ajzen (2002) also affirmed the statement above by revealing that sustainability could be fostered by the theory of planned behavior by demonstrating that intentions often play a huge part in people's behavior, which is further shown in three elements: people's attitudes, subjective norms, and perceived behavioral control.

McLaughlin and Stephens (2019) revealed that the media could wield the theory of planned behavior to accelerate the outcome of people's intentions as shown by the rate at which people's media engagement affected their behavior and eventual intentions to embark in certain activities. The implication of this statement above suggested that the media could create a means by which the people and institutions within a region could consistently become exposed to information regarding how certain activities of theirs are increasing carbon footprints, which in turn, is resulting in food shortages and experience of torrential rainfall as well as extreme change in temperatures (Paul et al., 2016).

Another instance in which the media could employ the theory of planned behavior could be seen through its capacity to evolve the intentions used in commercial endeavors. Chen and Tung (2014) broadened the statement above by revealing that the media could wield the theory of planned behavior alongside perceived moral behavior to ensure that respective consumers are made aware of how their purchases might either mar or strengthen the natural environment. It is no wonder that Ajzen (2011) showed that the use of the theory of planned behavior often resorts to showing the causal relationship that exists between the reaction of people and their subsequent reflections on the situation or experience.

Sustainable Media and Providing Environmental Responsibility in Pakistan

As insinuated by Qusien and Robbins (2023), when the media concentrates more on news coverage about projects that center on job creation and economic development, the people and the government become interested and happy. Volkmer et al. (2018) revealed that media

in Pakistan needs to evolve its news coverage to spread climate change since, currently, it only seeks traditional broadcast and news coverage which involves showing the political, economic, and social endeavors and practices of the country impacted by an incidence. In light of the statement above, there is a need to seek ways of enhancing the media coverage of climate change as a means of fostering environmental responsibility within the industry. According to Abbas et al. (2019), one of the ways of facilitating environmental responsibility within the media industry involves prioritizing corporate social responsibility.

Another means by which the media could facilitate environmental responsibility in its industry involved delving into Ajzen's (2011) claim that wielding the theory of planned behavior would equip an institution to make people, government, and organizations realize that there is a causal relationship between their attitudes and the eventual outcome of their intentions. In light of the statement above, Al-Swidi et al. (2014) revealed that the media could form the consistent role of divulging to people the dangers inherent in their daily activities such as not recycling and inculcating certain bad habits such as littering, which exacerbate pollution, increasing the effect of climate change in the natural environment.

Javed et al. (2020) also revealed that the struggle to decrease the rampant state of climate change could be fostered by the media when it used its news coverage and broadcast in a rather subjective manner to counter the intention of people in behaving in a certain manner. The media could create campaigns structured in such a manner that it involves changing the social behavior of people in Pakistan to become environmentally responsible in terms of pollution, thereby proving that their intentions, either consciously or unconsciously are not to negatively affect the natural environment but to rather enhance the status of the environment (Stead et al., 2005).

Ajzen and Schmidt (2020) revealed that the theory of planned behavior could be used in sustainable media to cause a change in people's and institutions' social and environmental behavior regarding how they partake in pollution and climate change. The implication of the statement above suggested that sustainable media includes seeking to change the social behavior of people within a particular region into adopting behaviors that do not prove hazardous to the natural environment.

Conclusion

This study wielded an extensive literature review on sustainable media as it pertains to Pakistan, showing how the media could adapt its industry into one that becomes consistently conscious of its carbon footprints. The study further revealed that there is a need for subsequent researchers to contribute to sustainable media, especially in light of its contribution to the Sustainable Development Goals entrenched in the United Nations' agenda for 2030. This study found that studies that examined the theory of planned behavior offer alternative roots by which the media could proffer environmental responsibility for its industry, thereby preventing the problem of rigidity from affecting climate change.

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